UTAH DIVISION OF AIR QUALITY
MODIFIED SOURCE PLAN REVIEW

S. Gale Chapman, President

Project fee code: N0327-007

Intermountain Power Service Corporation
850 West Brush Wellman Road
Delta, Utah 84624

RE:	Intermountain Generating Station DAQE-749-01 Modification to Increase Power Generating Capacity Millard County, Utah CDS-A, ATT, Title V, Title IV, NSPS
REVIEW ENGINEER:	Milka M. Radulovic
DATE:	July 17, 2001
NOTICE OF INTENT SUBMITTED:	April 5, 2001
PLANT CONTACT:	Rand Crafts
PHONE NUMBERS:	(435) 864-6494
FAX NUMBER:	(435) 864-0994
SOURCE LOCATION:	850 West Brush Wellman Road Delta, Millard County, Utah
UTM COORDINATES:	4,374.4 km Northing, 364.2 km Easting, Zone 12 datum NAD27

APPROVALS:

Peer Engineer _____
John Jenks

DAQ requests that a company/corporation official read the attached draft/proposed Plan Review with Recommended Approval Order Conditions. If this person does not understand or does not agree with the conditions, the PLAN REVIEW ENGINEER should be contacted within five days after receipt of the Plan Review. Special attention needs to be addressed to the Recommended AO Conditions because they will be recommended for the final AO. If this person understands and the company/corporation agrees with the Plan Review or Recommended AO Conditions, this person should sign below and return (can use FAX # 801-536-4099) within 10 days after receipt of the conditions. If the Plan Review Engineer is not contacted within 10 days, the Plan Review Engineer shall assume that the Company/Corporation official agrees with this Plan Review and will process the Plan Review towards final approval. A 30-day public comment period will be required before the Approval Order can be issued.

Thank You
Applicant

Contact_____
(Signature & Date)

OPTIONAL: In order for this Source Plan Review and associated Approval Order conditions to be administratively included in your Operating Permit (Application), the Responsible Official as defined in R307-415-3, must sign the statement below and the signature above is not necessary. THIS IS STRICTLY OPTIONAL! If you do not desire this Plan Review to be administratively included in your Operating Permit (Application), only the Applicant Contact signature above is required. Failure to have the Responsible Official sign below will not delay the Approval Order, but will require a separate update to your Operating Permit Application or a request for modification of your Operating Permit, signed by the Responsible Official, in accordance with R307-415-5a through 5e or R307-415-7a through 7i.

"Based on reasonable inquiry, I certify that the information provided for this

Approval Order has been true, accurate and complete and request that this Approval Order be administratively amended to the Operating Permit (Application)."

Responsible Official_____
(Signature & Date)

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TYPE OF IMPACT AREA

Attainment Area	Yes
NSPS	Yes
40 CFR Part 60, Subpart Da (Fossil-Fuel-Fired Steam Generators for Which Construction is Commenced After September 18, 1978), and Subpart Y (Coal Preparation Plants)	
NESHAP	No
MACT	No
Hazardous Air Pollutants (HAPs)	Yes
Hazardous Air Pollutants Major Source	Yes
(No HAPs involved in modification)	
New Major Source	No
Major Modification	No
PSD Permit	Yes
PSD Increment (modeling)	No
Operating Permit Program	
Minor	No
Major	Yes
Send to EPA	Yes
Comment period	30-day

FOR MODIFIED SOURCES

The Notice of Intent is for a modification to an existing source. The following standards are applicable to this review:

NSPS applies to modification?	No
PSD review of entire source required?	No
NESHAPS applies to modification?	No
HAPs involved in modification?	No
TITLE V required for entire source?	Yes
HAPs MAJOR for modification?	No
NONATT MAJOR for entire source?	No

Abstract

Intermountain Power Service Corporation (IPSC) operates the Intermountain Generating Station (IGS) coal fired steam-electric plant, consisting of two 875 MW units, that is located near Delta in Millard County. IPSC is requesting a modification to their current approval order (AO) DAQE-749-01 to uprate (increase) each unit generating capacity from 875 to 950 MW. The following are the modifications needed at the plant for the proposed uprate that will affect emissions:

1. Increase heat input through the main boilers
2. Add patented scrubber wall rings to provide more efficient SO_2 removal
3. Add more row of tubes in the boiler super heating section

There will be other changes which will not directly affect emissions, such as:

1. Replacement of two existing high pressure turbines with two current technology and high efficiency turbines
2. Addition of boiler safety valve, one new helper cooling tower without increasing total circulating flow rates and cycles of concentration, boiler feed pump performance upgrade, generator and isophase cooling enhancement, and others similar changes
3. Substituting emission rate limit of 0.024 grains per dry standard cubic feet for the Group I dust collectors with an alternate limit: monthly monitoring of a minimum 0.5 inches water gage differential pressure across the dust collectors.

In addition to the requested changes, emissions from the existing cooling towers were added to the plant potential to emit.

Millard County is an attainment area of the National Ambient Air Quality Standards (NAAQS) for all pollutants. New Source Performance Standards (NSPS), Subpart Da and Subpart Y applies to this source. Boiler 1 & 2 are also Group 1, Phase II units under the Acid Rain Program. IPSC is a major source of NO_x, SO_2, CO, and PM_{10}. Title V of the 1990 Clean Air Act applies to this source. The Title V permit will be administratively amended after this AO has been issued. The emissions, in tons per year, will change as follows: PM_{10} (+9.75), CO (+ 77.56), VOC (+ 0.69), HAPs (VOC and Non-VOC) (+??????).

Newspaper Notice

The Title V permit will be administratively amended after this AO has been issued.
It has been determined that the conditions of the Utah Administrative Code R307-401-6 and the Federal rules have been met. The Executive Secretary intends to issue an Approval Order after a 30-day public comment period is held. This public comment period is being held to receive and evaluate public input on the project proposed by IPSC.

I. DESCRIPTION OF PROPOSAL

1. PROCESS DESCRIPTION:

IGS is a fossil-fuel fired steam-electric generating station that primarily uses coal as fuel for the production of steam to generate electricity (SIC Code 4911). Both bituminous and subbituminous coals are utilized. Diesel fuel is are also combusted during the startup, shutdown, maintenance, performance, upsets and flame stabilization and used oil for energy recovery.

IGS is a two unit facility operating at a rated capacity of 875 megawatts (MW) per unit (gross). Approximately 5.3 million tons of coal and 600,000 gallons of oil (including used oil) are used each year in the production of electricity. Normal boiler operating capacity is about at 6.2 million pounds per hour of steam flow at 2822 psi. The current boiler maximum capacity rating (MCR) is 6.6 million lbs steam per hour at 2975 psi.

IGS has in place bulk handling equipment for the unloading, transfer, storage, preparation, and delivery of solid and liquid fuel to the boilers. No changes of this equipment are proposed. No changes in the usage of other raw materials or bulk chemicals are planned.

2. PROPOSED CHANGES:

IPSC is planning to enhance steam flow characteristics through the high pressure (HP) section of each turbine used to generate electricity. This involves the replacement of the HP section with a modified design that improves performance and reliability. This modification in and of itself will not increase plant capacity, but will instead lower emissions due to decreased fuel use from the resulting increased performance.

Combined proposed modifications to other areas of the plant will increase plant generating capacity. These modifications consist of re-configuring critical points that presently prevent the full utilization of present equipment. Other changes are needed for reliability, performance and/or routine maintenance purposes.

3. EMISSION CHARACTERISTICS:

The composition and physical characteristics of the emissions are expected to change as a result of the proposed modifications, indicated in the emission summary, which shows the anticipated changes in emission rates, temperature, air contaminant types, and concentration of air contaminants. The mass flow of chimney effluent may change proportionately with the change in the heat input.

The existing pollution control devices include low-NO_x burners, fabric filters, wet scrubbers and auxiliary equipment dust collectors.

4. POLLUTION CONTROL DEVICE DESCRIPTION:

The existing pollution control device equipment includes dual register low NO_x burners (B&W Mark V), GEESI baghouse type fabric filters for particulate removal, and GEESI flue gas desulfurization scrubbers. The existing low NO_x burners provide a nominal 60% reduction in potential combustion NO_x formation, the baghouse filters operate at nominal 99.95% efficiency,

and the existing wet scrubbers operate at nominal 90% efficiency. Control equipment for the handling and transfer of solid material include dust collection filters.

This proposed project includes modifications to the flue gas flow through scrubber modules to increase SO_2 and acid gas removal at proposed higher emission flows.

5. EMISSION POINT:

The present emission point for the IGS boilers is a lined chimney that discharges at 712 feet above ground level (5386 feet above sea level). The chimney location is 39° 39' 39" longitude, 112° 34' 46" latitude (UTM 4374448 meters Northing, 364239 meters Easting.).

Other emission points such as coal handling, cooling towers are located on the same site proximate to the chimney.

6. SAMPLING/MONITORING:

Emissions from boiler combustion are continuously sampled and monitored at the chimney for nitrogen oxides, sulfur oxides, carbon dioxide, and volumetric flow. Opacity is measured at the fabric filter outlet. Other parameters recorded include heat input and production level (megawatt load). Monitoring will remain unchanged. Other emissions not directly monitored are calculated using engineering judgement, emission factors, and fuel analyses. The type and location of the monitors will not be changed.

7. OPERATING SCHEDULE:

IGS operates 24 hours per day, seven days per week. This will not change as a result of the proposed modifications.

8. CONSTRUCTION SCHEDULE:

Construction of the modifications will be performed in a staged manner to accommodate use of normal plant maintenance outage periods.

9. MODIFICATION SPECIFICATIONS:

The changes covered by the modification include:

- **High Pressure Turbine Retrofit:**

  The high pressure turbine on each unit at IGS is scheduled to be replaced with a current technology, high efficiency turbine. This unit will increase high pressure turbine efficiency from approximately 84% to over 92%. Additionally, the turbine will be sized to provide up to 8.6% additional output.

- **Cooling Tower Performance Upgrade:**

The cooling towers on each unit at IGS are scheduled for performance enhancement modifications to increase heat rejection capacity. The enhancement consists of increasing cooling fill surface area by approximately 20% by constructing a new helper cooling tower for each unit. Total circulation flow rates and cycles of concentration will not change. However, flow will be reduced to the present towers by 20%, and redirected to the new helper towers to allow for a larger differential temperature change. To accommodate this expansion, cooling tower transformers feeding the cooling tower fan motors and new towers will be upgraded as well.

- **Boiler Safety Valve Additions:**

Rather than add new safety valves, IPSC will replace one existing electro relief valve (ERV) with one main steam safety valve on each unit. This will address reliability concerns with the existing valves and accommodate the planned increase in generation capacity.

- **Generator Cooling Enhancement:**

IPSC intends to upgrade the current generator and stator cooling systems.

- **Isophase Bus Cooling Enhancement:**

The 26kv generator electrical bus feeding the main step-up transformer will be upgraded to enhance the current isophase bus duct cooling systems.

- **Large Motor Bus Loading Equalization:**

IPSC plans to equalize the loading between the large and small motor bus. Due to limited tap adjustment capability on the auxiliary transformers feeding these load centers, several motors will be moved from one supply to the other in order to maintain required motor terminal voltages as unit output is increased.

- **Boiler Feed Pump Performance Upgrade:**

The boiler feed pump will be enhanced with improved bearing housings, flow path smoothing, and impeller clearance modifications to provide increased pump output and reliability.

- **Main Step-up Transformer Cooling:**

The step-up transformers will be modified to increase the transformer cooling system capacity for better temperature control of the transformer oil, core, and housing.

- **High Pressure Heater Drain Line Modifications:**

High pressure heater drain lines will be modified to eliminate resonant vibration at increased load.

- **Boiler Modification:**

A comprehensive study was performed by the manufacturer of the boilers (Babcock & Wilcox). This study reviewed all aspects of boiler operation at the new turbine output levels. The study also included evaluation of current technologies and operating practices for minimizing emissions, without the need to replace burners. The study recommended addition of surface area specific to primary superheat section. IPSC proposes to add 24 rows of superheat tubes across the full back-pass (convective section) of each boiler. This modification will help eliminate transient temperature anomalies and provide stable and efficient operation at the new higher rating.

- **Circulating Water Makeup Modifications:**

A new circulating water makeup design will support increased makeup requirements and add a degree of redundancy to the system.

Modification Affecting Emissions

- **Increase Fuel Flow (Heat Input):**

In order to utilize increased capacity, coal combustion will increase approximately 5.9%.

- **Scrubber Wall Ring:**

Patented wall rings will be installed in all twelve (12) scrubber absorber vessels to move flow back to the center of the vessel, preventing slip, and providing more efficient SO_2 and acid gas capture in the flue gas.

- **PRODUCTION SUMMARY:**

The proposed project will increase generation capacity from 875 to approximately 950 MWhe, with steam flow design increasing from 6.2 to 6.9 million pounds per hour. Design heat input will increase from 8,352 to 9,225 million Btu per hour, requiring an increase from 5.3 to 5.6 million tons of coal each year. There will be no NO_x emission increase due to a better, stable, more efficient combustion process (firing in a specific combination the burners, and adding of superheat tubes) and elimination of transient temperature anomalies and provide stable and efficient operation at the new higher rating. Therefore, hourly emission limit for NO_x is decreased in proportion with fuel input increase.

- **Group I Dust Collectors Limit**

IPSC is requesting that current emission limit of 0.024 grains per dry standard cubic feet be replaced with an alternate limit: monthly monitoring of a minimum of 0.5 inches

water gage differential pressure drop across the Group I duct collector fabric filters. This limit will be monitored on a monthly basis.

- Cooling Tower emissions were added to the plant's potential to emit since they were not included in the previous AO.

II. EMISSION SUMMARY

The emissions from the entire plant will be as follows:

Pollutant	Current Emissions (Last 2-year Actual Average) tons/year	Emission Increases tons/year	Total Emissions tons/year
PM_{10}	787.67	9.75	797.41
SO_2		3586.31	0.00
3586.31			
NO_x	25143.97	0.00	25143.97
CO		1317.06	77.56
1394.62			
VOC	11.81	0.69	12.50
HAPs			
Lead	0.098	0.007	0.105
Beryllium	0.001195529	-0.00008	0.001119
Mercury	0.081	0.024	0.105
Fluorides (HF)	9.70	0.42	10.12
Sulfuric Acid	4.06	-0.11	3.96
Other HAPs (non-VOC)	59.38	0.40	59.78

Pollutant	Current PTE Emissions tons/year	Emission Increases tons/year	Total Emissions tons/year
PM_{10}	248.88	(9.75+538.79*)	797.41
SO_2		3,698.32	0.00
3,698.32			
NO_x	24,178.63	0.00	24,178.63
CO	1,312.44	77.56	1390.00
VOC	14.29	0.69	13.60
HAPs			
Lead	0.098	0.007	0.105
Beryllium	0.001195529	-0.00008	0.001119
Mercury	0.081	0.024	0.105
Fluorides (HF)	9.70	0.42	10.12

Sulfuric Acid	4.06	-0.11	3.96
Other HAPs (non-VOC)	59.38	0.40	59.78
	HAPs	82.67????	

*Denotes existing emissions from the existing cooling towers inadvertently omitted from the previous AOs

III. BEST AVAILABLE CONTROL TECHNOLOGY (BACT) ANALYSIS

BACT applies to each emission point.

There will be no new emission point or new, replaced or reconstructed pollution generating equipment added as a result of this modification. BACT performed in previous engineering review applies to this modification.

IV. APPLICABILITY OF FEDERAL REGULATIONS AND UTAH ADMINISTRATIVE CODES (UAC)

The Notice of Intent submitted is for an existing source. It is not a new major source or a major modification. At the time of this review the Utah Administrative Code Rules 307 (UAC R307) and federal regulations have been examined to determine their applicability to this Notice of Intent. The following rules have been specifically addressed.

1. R307-101-2, Modification
2. R307-107, UAC - Unavoidable breakdown reporting requirements.
3. R307-150 Series, UAC - Inventories, Testing and Monitoring.
4. R307-201-1(2), UAC - 20% minimum opacity limitation at all emission points.
5. R307-201-1(9), UAC - Opacity Observation.
6. R307-203. Emission Standards: Sulfur Content of the Fuel
7. R307-205 (UAC) - Emission Standards: Fugitive Emissions and Fugitive Dust.
8. R307-215. Emission Standards: Acid Rain
9. R307-401, Utah Administrative Code (UAC) UAC - Notice of Intent required for a modified source.
10. R307-405. Permits: Prevention of Significant Deterioration of Air Quality

11. R307-406, UAC - Visibility

12. R307-410, UAC - Permits: Emissions Impact Analysis (Air Quality Modeling)

V. RECOMMENDED APPROVAL ORDER CONDITIONS

General Conditions:

1. This Approval Order (AO) applies to the following company:

   Intermountain Power Service Corporation
   850 West Brush Wellman Road
   Delta, Utah 84624
   Phone Number: (435) 864-4414
   Fax Number: (435) 864-4970

   The equipment listed below in this AO shall be operated at the following location:

   PLANT LOCATION:

   850 West Brush Wellman Road, Delta, Millard County, Utah

   Universal Transverse Mercator (UTM) Coordinate System: datum NAD27
   4,374.4 kilometers Northing, 364.2 kilometers Easting, Zone 12

2. All definitions, terms, abbreviations, and references used in this AO conform to those used in the Utah Administrative Code (UAC) Rule 307 (R307), and Title 40 of the Code of Federal Regulations (40 CFR). Unless noted otherwise, references cited in these AO conditions refer to those rules.

3. The limits set forth in this AO shall not be exceeded without prior approval in accordance with R307-401.

4. Modifications to the equipment or processes approved by this AO that could affect the emissions covered by this AO must be approved in accordance with R307-401-1.

5. All records referenced in this AO or in applicable NSPS, which are required to be kept by the owner/operator, shall be made available to the Executive Secretary or Executive Secretary's representative upon request, and the records shall include the two-year period prior to the date of the request. All records shall be kept for the following minimum periods:

   A. All Records — Two years
   B. Used oil consumption — Three years
   C. Emission inventories — Five years from the due date of each emission statement or until the next inventory is due, whichever is longer.

6. Intermountain Power Service Corporation (IPSC) shall conduct its operations of the Intermountain Generating Station (IGS) coal fired electric steam plant in accordance with the terms and conditions of this AO, which was written pursuant to IPSC's Notice of Intent

submitted to the Division of Air Quality (DAQ) on April 5, 2001, May 31, 2001, August 26, 2001, September 5, 2001, September 19, 2001

7. This AO shall replace the AO (DAQE-749-01) dated September 11, 2001.

This AO shall not supersede the Experimental AO's issued for the IGS located in Millard County.

8. The approved installations shall consist of the following equipment or equivalent*:

A. Unit #1 Coal Fired Boiler (Subject to NSPS, Subpart Da)
Rating - 9,225 x 10^6 Btu/hr (MMBtu/hr)
B. Unit #2 Coal Fired Boiler (Subject to NSPS, Subpart Da)
Rating - 9,225 MMBtu/hr
C. Coal railcar unloading dust collector 1A
D. Coal railcar unloading dust collector 1B
E. Coal railcar unloading dust collector 1C
F. Coal railcar unloading dust collector 1D
G. Coal truck unloading dust collector 2
H. Coal reserve reclaim dust collector 3
I. Coal transfer building #1 dust collector 4
J. Coal transfer building #2 dust collector 5
K. Coal transfer building #4 dust collector 6
L. Coal crusher building dust collector 11
M. U1 Generation building coal dust collector 13A
N. U1 Generation building coal dust collector 13B
O. U2 Generation building coal dust collector 14A
P. U2 Generation building coal dust collector 14B
Q. Coal pile active and reserve
R. Coal Stackout
S. Fuel oil tank 1A
Capacity - 675,000 gallons
T. Fuel oil tank 1B
Capacity - 675,000 gallons
U. Limestone unloading dust collector 1A
V. Limestone unloading dust collector 1B
W. Limestone transfer dust collector 1
X. Limestone reclaim dust collector 2
Y. Limestone silo bin vent filter
Z. Limestone crusher dust collector 3
AA. Limestone preparation dust collector 4
BB. Limestone storage pile
CC. Lime silo dust collector 1
DD. Lime hopper dust collector 2
EE. Soda ash silo dust collector 3
FF. Soda ash hopper dust collector 4
GG. Fly ash silo bin vent filter 1A

HH. Fly ash silo bin vent filter 1B
II. Combustion byproducts stackout & stockpile
JJ. Combustion byproducts landfill
KK. Unit 1 cooling tower 1A
LL. Unit 1 cooling tower 1B
MM. Unit 2 cooling tower 1A
NN. Unit 2 cooling tower 1B
OO. Coal sample preparation building dust collector
PP. Sandblast facility dust collector
QQ. U1 Generation building vacuum cleaning dust collector
RR. U2 Generation building vacuum cleaning dust collector
SS. U1 Fabric filter vacuum cleaning dust collector
TT. U2 Fabric filter vacuum cleaning dust collector
UU. GSB vacuum cleaning dust collector
VV. Guzzler truck dust collector
WW. Emergency diesel generators
1A, rated at - 4,000 Hp
1B, rated at - 4,000 Hp
1C, rated at - 4,000 Hp
XX. Solvent washers
YY. Diesel driven fire pump rated at 290 Hp 1B
ZZ. Diesel driven fire pump rated at 290 Hp 1C
AAA. Auxiliary boiler 1A (not subject to NSPS)
Rating - 166 MMBtu/hr
BBB. Auxiliary boiler 1B (not subject to NSPS)
Rating - 166 MMBtu/hr
CCC. Coal Conveyors
DDD. Paint booth/shops
EEE. Engine driven equipment including compressors, generators, hydraulic pumps and diesel fire pumps
FFF. Bulb recycling crusher
GGG. Laboratory fume hoods
HHH. Gasoline tank
Capacity - 500 gallons
III. Diesel tank
Capacity - 10,000 gallons
JJJ. Diesel day tanks
Capacity - not exceeding 560 gallons per tank
KKK. Mobile oil storage tanks
Capacity - not exceeding 12,000 gallons per tank
LLL. Turbine lube oil units
Capacity - not exceeding 40,000 gallons per unit
MMM. Underground storage diesel tank
Capacity - 20,000 gallons
NNN. Underground storage gasoline tank
Capacity - 6,000 gallons
OOO. Used oil tank

Capacity - 10,000 gallons

PPP. Class III Industrial Waste Landfill
QQQ. Paved haul road
RRR. Haul road and access road
SSS. Coal truck unloading grating
TTT. Helper cooling tower

* Equivalency shall be determined by the Executive Secretary.

Limitations and Tests Procedures

9. Emissions to the atmosphere at all times from the indicated emission points shall not exceed the following rates and concentrations:

Each Main Boiler (Rated at 9,225 x 10^6 Btu/hr)

Pollutant	lb/ 10^6 Btu heat input	
PM_{10}	0.020	lb/ 10^6 Btu heat input
SO_2	0.1415	lb/ 10^6 Btu heat input based on 30-day rolling-average
		10.0 % of the potential combustion concentration
NO_x	0.47	lb/ 10^6 Btu heat input based on 30-day rolling-average

Dust Collectors

Pollutant/Source	minimum of differential pressure (inches of water gage)
PM_{10}	
Rail car unloading (4 units)	0.5
Transfer building one	0.5
Unit one 13A	0.5
Transfer building two	0.5
Transfer building four	0.5
Crusher building one	0.5
Unit one 13B	0.5
Unit two 14A	0.5
Unit two 14B	0.5
Limestone preparation building	0.5

Each Auxiliary Boiler (Rated at 166 x 10^6 Btu/hr)

Pollutant	lb/ 10^6 Btu heat input	lbs/hr
PM_{10}	0.10	20

SO_2	0.69	100
NO_x	0.35	58

10. Visible emissions from the following emission points shall not exceed the following values:

    A. All abrasive blasting - 40% opacity
    B. All other points - 20% opacity

    Opacity observations of emissions from stationary sources shall be conducted according to 40 CFR 60, Appendix A, Method 9.

    For sources that are subject to NSPS opacity standards shall be determined by conducting observations in accordance with 40 CFR 60.11(b) and 40 CFR 60, Appendix A, Method 9.

11. The following consumption limit shall not be exceeded:

    50,000 barrels of fuel oil consumed per calendar year in the auxiliary boilers.

    To determine compliance with annual limit, the owner/operator shall calculate a total by the January 20th of each year using data from the previous 12 months. Records of consumption shall be kept for all periods when the auxiliary boiler is in operation. Consumption shall be determined by fuel oil totalizer records. The records of consumption shall be kept on a monthly basis.

12. The emergency generators shall be operated on an emergency basis only, except for routine engine maintenance and testing. Records documenting generator usage shall be kept in a log and they shall show the date the generator was used, the duration in hours of the of generator usage, and the reason for each generator usage.

13. The diesel driven fire pumps shall be operated on an emergency basis only, except for routine engine and fire system maintenance and testing. Records documenting diesel driven fire pump usage shall be kept in a log and they shall show the date the diesel driven fire pump was used, the duration in hours of the of diesel driven fire pump, and the reason for each diesel driven fire pump usage.

Roads and Fugitive Dust

14. IPSC shall abide by the latest fugitive dust control plan submitted to the Executive Secretary for control of all dust sources associated with the Intermountain Power Generation site.

    The haul road length, speed or any other parameter used to calculate emissions shall not be increased above the limits established in the fugitive dust control plan. The haul road speed shall be posted.

15. The facility shall abide by all applicable requirements of R307-205 for Fugitive Emission and Fugitive Dust sources.

Fuels

16. The owner/operator shall combust only bituminous and subbituminous coals as primary fuels and shall only use diesel oil or natural gas during the startup, shutdown, maintenance, performance, upsets and flame stabilization in the 9,225 x 10^6 Btu/hr boilers. Only No. 2 oil shall be used in 166 x 10^6 Btu/hr boilers. The owner/operator may fuel-blend self-generated used oil with coal at the active coal pile reclaim structure providing that self-generated used has not been mixed with hazardous waste.

17. The sulfur content of any fuel oil combusted shall not exceed:

    A. 0.85 lb per x 10^6 Btu heat input for fuel oil used in the main boilers.
    B. 0.58 percent by weight for fuel oil combusted in the auxiliary boilers.

    The sulfur content shall be determined by ASTM Method D-4294-89 or approved equivalent. Certification of fuel oil shall be either by IPSC's own testing or test reports from the fuel oil marketer.

Federal Limitations and Requirements

18. In addition to the requirements of this AO, all applicable provisions of 40 CFR 60, New Source Performance Standards (NSPS) Subpart A, 40 CFR 60.1 to 60.18 and Subpart Da, 40 CFR 60.40a to 60.49a (Standards of Performance for Electric Utility Steam Generating Units for Which Construction is Commenced After September 18, 1978) and Subpart Y, 40 CFR 60.250 to 60.254 (Standards of Performance for Coal Preparation Plants) apply to this installation.

Records & Miscellaneous

19. At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any equipment approved under this AO including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Executive Secretary which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. All maintenance performed on equipment authorized by this AO shall be recorded, and the records shall be maintained for a period of two years.

20. The owner/operator shall comply with R307-150 Series. Inventories, Testing and Monitoring.

21. The owner/operator shall comply with R307-107. General Requirements: Unavoidable Breakdowns.

The Executive Secretary shall be notified in writing if the company is sold or changes its name.

This AO in no way releases the owner or operator from any liability for compliance with all other applicable federal, state, and local regulations including R307.

A copy of the rules, regulations and/or attachments addressed in this AO may be obtained by contacting the Division of Air Quality. The Utah Administrative Code R307 rules used by DAQ, the Notice of Intent (NOI) guide, and other air quality documents and forms may also be obtained on the Internet at the following web site: http://www.eq.state.ut.us/eqair/aq_home.htm

The annual emission estimations below include point source, fugitive emissions, fugitive dust and do not include road dust, tail pipe emissions, grandfathered emissions etc.. These emissions are for the purpose of determining the applicability of Prevention of Significant Deterioration, nonattainment area, maintenance area, and Title V source requirements of the R307. They are not to be used for determining compliance.

The Potential To Emit (PTE) emissions for the IPSC power generation plant are currently calculated at the following values:

	Pollutant	Tons/yr
A.	PM_{10}	248.88
B.	SO_2	3,698.32
C.	NO_x	24,178.63
D.	CO	1,312.44
E.	VOC	14.29
F.	HAPs	82.67
	Lead	0.105
	Beryllium	0.001119
	Mercury	0.105
	Fluorides (HF)	10.12
	Sulfuric Acid	3.96
	Other non-VOC HAPs	59.78